We claim:

1. A bandpass filter, comprising:

a bandpass filter input and a bandpass filter output;

a series circuit connected between said bandpass filter input and said bandpass filter output, said series circuit being formed of a first capacitor, a first parallel LC element connected to said first capacitor, a second capacitor connected to said first parallel LC element, and an inductor connected to said second capacitor;

a second parallel LC element having a first connection connected to a node between said first parallel LC element and said second capacitor and a second connection coupled to a fixed reference-ground potential via a third capacitor; and

a third parallel LC element having a first connection connected to a node between said second capacitor and said inductor and a second connection coupled to the fixed reference-ground potential.

2. The bandpass filter according to claim 1, wherein said second connection of said third parallel LC element is directly connected to the fixed reference-ground potential.

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each of said frequency domain filter paths containing a switching unit for switching said first and said second diode in said frequency domain filter path during an operation of the circuit configuration for turning a respective one of said bandpass filters;

a third diode having a first terminal connected to said first node and a fourth diode having a first terminal connected to said second node of said frequency domain filter paths, such that a respective cathode of said third diode and of said fourth diode is connected to anodes of said first diodes and said second diodes, respectively;

a load-dependent DC voltage source having a first connection and a second connection; and

said third diode and said fourth diode each having a second terminal respectively connected to said first connection and said second connection of said load-dependent DC voltage source.

6. The circuit configuration according to claim 5, wherein said first diode, said second diode, said third diode, and said fourth diode are PIN diodes.

7. The circuit configuration according to claim 5, wherein each of said switching units includes:

a first electrical resistor and a second electrical resistor respectively connected, via a first terminal thereof, to said input and to said output of an associated one of said frequency domain filters, and to one another via a second terminal thereof;

an on/off switch having a first terminal connected between said first electrical resistor and said second electrical resistor, and a second terminal connected to a fixed reference-ground potential; and

a capacitor having a first terminal connected between said first electrical resistor and said second electrical resistor, and a second terminal connected to the fixed reference-ground potential.

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3. The bandpass filter according to claim 1, which comprises a fourth capacitor connected between said second connection of said third parallel LC element and the fixed reference-ground potential.

4. The bandpass filter according to claim 1, which comprises a further capacitor having a first terminal connected to a node between said second capacitor and said inductor and a second terminal connected to the fixed reference-ground potential.

5. A circuit configuration, comprising:

an AC voltage input terminal and an AC voltage output terminal;

a plurality of frequency domain filter paths defined between said AC voltage input terminal and said AC voltage output terminal, and connected in parallel between a common first node and a common second node both coupled to a DC voltage connection;

each of said frequency domain filter paths containing at least one bandpass filter according to claim 1 connected in series with a first diode and a second diode connected in opposite forward direction from said first diode;